

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER 89-017

SITE CLEANUP REQUIREMENTS FOR

MICRO STORAGE CORPORATION  
KIM CAMP III

2986 OAKMEAD VILLAGE COURT FACILITY  
SANTA CLARA, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. Groundwater pollution has been found at a site located at 2986 Oakmead Village Court, Santa Clara, Santa Clara County. Kim Camp III, who purchased the site in May 1979, and Micro Storage Corporation, the tenant from January 1985 to December 1986, are hereinafter referred to as the dischargers. Another former tenant of the site was International Diagnostic Technology, Inc. (IDT).
2. IDT occupied the site from March 1979 to June 1984, and used the facility for offices, product storage, research and development, and assembly and testing of electro-optical instruments, aqueous solution diagnostic test kits and related medical devices. The chemicals used by IDT included various acids, aromatic hydrocarbons, trichloromethane, methylene chloride, and carbon tetrachloride. To date, no evidence indicates that IDT or Kim Camp III used the pollutants found in the groundwater onsite.
3. Micro Storage occupied the site from January 1985 to December 1986, and used the facility for research and development and pilot manufacturing. Counsel for Micro Storage has advised the Regional Board Staff that Micro Storage Corporation was dissolved as a corporation by the State of California on August 16, 1988. The chemicals used by Micro Storage included trichlorotrifluoroethane (Freon 113). To date no evidence indicates that Micro Storage used the pollutants trichloroethylene (TCE) and trichloroethane (TCA) found in the groundwater.
4. The site is located adjacent to and upgradient of the former Intel Magnetics site (3000 Oakmead Village Drive, Santa Clara, Regional Board NPDES Permit Order No. 86-14), which is on the EPA Superfund National Priority List.

5. Results from Intel's monitoring wells indicated upgradient pollution, and the dischargers installed four monitoring wells in 1987 which found significant pollution adjacent to the building on the site. Pollution levels found in the groundwater on the site include 3400 parts per billion (ppb) trichlorotrifluoroethane (Freon 113), 750 ppb trichloroethene (TCE), and 570 ppb trichloroethane (TCA).
6. As evidenced by the pollution levels in the dischargers' and Intel's monitoring wells, groundwater pollution found on the site has migrated downgradient and combined with the pollution plume from the former Intel Magnetics site.
7. This site is now considered by EPA as a combined Superfund site with Intel Magnetics. EPA, in a October 12, 1988 memo to Board staff, indicated it has changed the Superfund site name from Intel Magnetics to Micro Storage/Intel Magnetics. A September 1988 technical report prepared by a consulting firm under contract to EPA has determined that the 2986 Oakmead Village Court site is a primary source of VOC contamination.
8. Investigations undertaken by Intel Corporation have defined the vertical extent of the combined pollution plume in the downgradient direction, including the plume of those pollutants apparently emanating from the dischargers' site.
9. Investigations undertaken by the dischargers have characterized general source locations, onsite soil pollution and onsite shallow groundwater pollution.
10. Kim Camp III submitted a workplan for the completion of a remedial investigation / feasibility study (RI/FS) on October 4, 1988. Board Staff and EPA will review this workplan for compliance with CERCLA/SARA (Superfund) regulations and guidance documents. Based on this review, Board staff intends to make future recommendations to the Board for revisions to this Order that will ensure dischargers' compliance with CERCLA/SARA regulations and guidance documents.
11. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives and beneficial uses for South San Francisco Bay and contiguous surface and groundwaters.
12. The existing and potential beneficial uses of the groundwater underlying and adjacent to the facility include:
  - a. Industrial process water supply
  - b. Industrial service supply
  - c. Municipal and Domestic supply

d. Agricultural supply

13. The dischargers have caused or permitted, and threaten to cause or permit waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.
14. This action is an order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
15. Onsite and offsite interim containment and cleanup measures need to be implemented to alleviate the threat to the environment posed by the continued migration of the groundwater plume of organic solvents and to provide a substantive technical basis for designing and evaluating the effectiveness of final cleanup alternatives.
16. The Board has notified the dischargers and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.
17. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of the waters of the State is prohibited.
2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.
3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.

B. SPECIFICATIONS

1. The storage, handling, treatment or disposal of polluted soil or groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. Micro Storage Corporation shall conduct monitoring activities as needed to define the current local hydrogeologic conditions, and the lateral and vertical extent of soil and groundwater pollution. Results of such monitoring activities shall be submitted to the Board. Should monitoring results show evidence of plume migration, additional plume characterization may be required. Within 60 days of the Executive Officer's determination and actual notice to Kim Camp III that Micro Storage Corporation has failed to comply with this paragraph, Kim Camp III, as landowner, shall comply with this specification.

C. PROVISIONS

1. The dischargers shall comply with Prohibitions A.1., A.2., and A.3., and Specifications B.1. and B.2. above, in accordance with the following time schedule and tasks:

COMPLETION DATE/TASK:

- a. 1. COMPLETION DATE: March 1, 1989

TASK: **GROUNDWATER POLLUTION CHARACTERIZATION:** Submit a technical report acceptable to the Executive Officer containing a proposal to define the vertical extent of the onsite groundwater pollution.

2. COMPLETION DATE: March 1, 1989

TASK: **SITE SAMPLING AND SAFETY PLANS:** Submit technical reports acceptable to the Executive Officer containing Quality Assurance Project Plans, Site Safety Plans, and Site Sampling Plans. The Quality Assurance Project Plans, Site Safety Plans, and Site Sampling Plans format and contents shall be consistent with CERCLA/SARA regulations and guidance documents.

3. COMPLETION DATE: June 1, 1989

TASK: **COMPLETION OF GROUNDWATER CHARACTERIZATION:** Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks to define the vertical extent of the onsite groundwater pollution.

- b. 1. COMPLETION DATE: March 1, 1989

**TASK: EVALUATION OF INTERIM REMEDIAL ACTIONS:** Submit a technical report acceptable to the Executive Officer which contains a proposal for selecting and evaluating potential remedial actions. This report shall consider, at a minimum, soil vapor extraction, soil excavation and treatment or disposal, and groundwater extraction, treatment and disposal.

2. COMPLETION DATE: June 1, 1989

**TASK: INTERIM REMEDIAL ACTIONS:** Submit a technical report acceptable to the Executive Officer which contains an evaluation of interim remedial alternatives, a recommended plan for interim remediation onsite, and an implementation time schedule. This report shall evaluate the removal and/or cleanup of polluted soils; evaluate alternative hydraulic control systems to contain and to initiate cleanup of polluted groundwater; and include a completed NPDES application to discharge to surface waters, if such discharge is an element of the plan.

3. COMPLETION DATE: October 1, 1989

**TASK: COMPLETION OF INTERIM REMEDIAL ACTIONS:** Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks identified in the technical report submitted for Task 2.b.2.

c. 1. COMPLETION DATE: April 1, 1990

**TASK: a) EVALUATE INTERIM HYDRAULIC CONTAINMENT AND SOIL REMOVAL MEASURES:** Submit a technical report satisfactory to the Executive Officer which evaluates the effectiveness of the interim hydraulic containment system. The evaluation shall include, but need not be limited to, an estimation of the flow capture zone of the extraction wells, establishment of the cones of depression by field measurements, and presentation of chemical monitoring data, if extraction wells are used. This report shall also evaluate and document the removal and/or cleanup of polluted soils, if such removal and/or cleanup is an element of the remedial measures.

**b) MODIFICATION TO INTERIM REMEDIAL ACTIONS:** Specific modifications to the system and an implementation time schedule shall be proposed in the event that the hydraulic control system is demonstrated not to be effective in containing and removing the onsite pollutants.

2. COMPLETION DATE: July 1, 1990

**TASK: COMPLETION OF MODIFICATIONS TO INTERIM REMEDIAL ACTIONS:** Submit a technical report acceptable to the Executive Officer documenting completion of the necessary tasks identified in the technical report submitted for Task 2.c.1.b).

d. **COMPLETION DATE: July 1, 1990**

**TASK: PROPOSED FINAL REMEDIAL ACTION PLAN:** Submit a technical report acceptable to the Executive Officer containing the result of the remedial investigation; an evaluation of the installed interim remedial measures; a feasibility study evaluating alternative final remedial measures; the recommended measures necessary to achieve final cleanup objectives; and the tasks and time schedule necessary to implement the recommended final remedial measures.

2. The submittal of technical reports evaluating proposed interim and final remedial measures will include a projection of the cost, effectiveness, benefits and impact on public health, welfare, and environment of each alternative measure. The remedial investigation and feasibility study must be consistent with guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300); Superfund Amendments and Reauthorization Act of 1986; CERCLA/SARA guidance documents with reference to Remedial Investigations and Feasibility Studies; and the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California."
3. If the dischargers are delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the discharger shall promptly notify the Executive Officer. In the event of such delays, the Board may consider modification of the task completion dates established in this Order.
4. Technical reports on compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted monthly to the Board commencing with the February 1989 report due on March 15, 1989. On a monthly basis thereafter, these reports shall consist of a brief letter report that, (1) summarizes work completed since submittal of the previous report, and work projected to be completed by the time of the next report, (2) identifies any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles, and (3) includes, in the event of non-compliance with Provisions

of this Order, written notification which clarifies the reasons for non-compliance and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non-compliance on achieving compliance with the remaining requirements of this Order.

5. In addition to the monthly report required in Provision 4 the dischargers shall submit a quarterly technical report commencing with the March 1989 quarterly report due April 15, 1989. The quarterly technical report shall include, but need not be limited to, updated water table and piezometric surface contour maps, pollution concentration contour maps for all affected water bearing zones, cross-sectional geological maps describing the hydrogeological setting of the site, and appropriately scaled and detailed base maps showing the location of all monitoring wells and extraction wells, and identifying adjacent facilities and structures. The above information will be generated on a quarterly basis.
6. All hydrogeological plans, specifications, reports, and documents shall be signed by or stamped with the seal of a registered geologist, engineering geologist or professional engineer.
7. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.
8. The dischargers shall maintain in good working order, and operate, as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.
9. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, shall be provided to the following agencies:
  - a. Santa Clara Valley Water District
  - b. Santa Clara County Health Department
  - c. City of Santa Clara
  - d. State Department of Health Services/TSCD
  - e. Environmental Protection Agency, Region IX


The Executive Officer shall receive three copies of all correspondence, reports and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this

Order.

10. The dischargers shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code:
  - a. Entry upon dischargers' premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
  - b. Access to copy any records required to be kept under the terms and conditions of this Order.
  - c. Inspection of any monitoring equipment or methodology implemented in response to this Order.
  - d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the dischargers.
11. The dischargers shall file a report on any changes in site occupancy and ownership associated with the facility described in this Order.
12. If any hazardous substance is discharged in or on any waters of the State, or discharged and deposited where it is, or probably will be discharged in or on any waters of the State, the dischargers shall report such a discharge to this Board, at (415) 464-1255 on weekdays during office hours from 8 a.m. to 5 p.m., and to the Office of Emergency Services at (800) 852-7550 during non-office hours. A written report shall be filed with the Board within five (5) working days and shall contain information relative to: the nature of waste or pollutant, quantity involved, duration of incident, cause of spill, Spill Prevention, Control and Countermeasure Plan (SPCC) in effect, if any, estimated size of affected area, nature of effects, corrective measures that have been taken or planned, and a schedule of these activities, and persons notified.
13. The Board will review this Order periodically and may revise the requirements when necessary.



I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on January 18, 1989.

  
Steven R. Ritchie  
Executive Officer